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**To: CHRISTOPHER KOHARSKI**

**Location: RND-6D74**

**Art Unit: 3763**

**Thursday, January 15, 2009**

**Case Serial Number: 09/143503**

**From: TERRENCE SOLOMON**

**Location: EIC3700**

**RND-8B31**

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## Search Notes

US patent 5554121 is not involved in any current or past litigated cases.

### Sources:

- Lexis/Nexis
- Courtlink
- Questel-Orbit

280210 (08) 5554121 September 10, 1996

UNITED STATES PATENT AND TRADEMARK OFFICE GRANTED PATENT

5554121

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September 10, 1996

Intraluminal catheter with high strength proximal shaft

**REEXAM-LITIGATE:** March 23, 1998 - Reexamination requested Mar. 23, 1998 by David M. Crompton, Crompton, Seager and Tufte, Reexamination No. 90/004,946 (O.G. May 19, 1998) Ex. Gp.: 3734

April 9, 1997 - Reexamination requested Apr. 9, 1997 by David M. Crompton, Nawrocki, Rooney & Sivertson, Reexamination No. 90/004602 (O.G. May 27, 1997) Ex. Gp.: 3306

**REISSUE:** August 28, 1998 - Reissue Application filed Ex. Gp.: 3306; Re. S.N. 09/143,503 (O.G. September 19, 2000)

**APPL-NO:** 280210 (08)

**FILED-DATE:** July 25, 1994

**GRANTED-DATE:** September 10, 1996

**ASSIGNEE-PRE-ISSUE:** November 25, 1994 - ASSIGNMENT OF ASSIGNORS INTEREST (SEE DOCUMENT FOR DETAILS)., ADVANCED CARDIOVASCULAR SYSTEMS, INC. 3200 LAKESIDE DRIVE SANTA CLARA, CA 95052-8167, Reel and Frame Number: 007266/0619

**ASSIGNEE-AT-ISSUE:** Advanced Cardiovascular Systems, Inc., Santa Clara, California, United States (US), United States company or corporation (02)

**LEGAL-REP:** Crosby, Heafey, Roach & May

**CORE TERMS:** catheter, tubular, proximal, distal, shaft, dilatation, polymer, balloon, guidewire, lumen ...

Source: [Legal > / ... / > Utility, Design and Plant Patents](#) 

Terms: [patno=5554121](#) ([Edit Search](#) | [Suggest Terms for My Search](#))

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Segments: Assignee, Cert-correction, Legal-rep, Legal-status, Lit-reex, Opposition, Patno, Reexam-cert, Reexam-litigate, Reissue, Reissue-comment, Title

Date/Time: Thursday, January 15, 2009 - 9:07 AM EST



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Patent Search 5,554,121 1/15/2009

No cases found.

Selected file: PLUSPAT  
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PRT SS 1 MAX 1 LEGALALL

1 / 1 PLUSPAT - ©Questel - image

**Patent Number :**

US5554121 A 19960910 [US5554121]

**Patent Number 2 :**

US5554121 B1 19980714 [US5554121]

**Title :**

(A) Intraluminal catheter with high strength proximal shaft

**Patent Assignee :**

(A) ADVANCED CARDIOVASCULAR SYSTEM (US)

**Patent Assignee :**

Advanced Cardiovascular Systems, Inc., Santa Clara CA [US]

**Patent Assignee 2 :**

(B1) ADVANCED CARDIOVASCULAR SYSTEM (US)

**Inventor(s) :**

(A) AINSWORTH ROBERT D (US); CHENG TAI C (US); WASICEK LAWRENCE D (US)

**Application Nbr :**

US28021094 19940725 [1994US-0280210]

**Priority Details :**

US28021094 19940725 [1994US-0280210]

**Intl Patent Class :**

(A) A61M-029/00

**IPC Advanced All :**

A61L-029/00 [2006-01 A L I R M JP]; A61L-029/06 [2006-01 A - I R M EP];

A61L-029/14 [2006-01 A - I R M EP]; A61M-025/00 [2006-01 A - I R M EP];

A61M-029/02 [2006-01 A - I R M EP]

**IPC Core All :**

A61L-029/00 [2006 C - I R M EP]; A61M-025/00 [2006 C - I R M EP];

A61M-029/02 [2006 C - I R M EP]

**EPO ECLA Class :**

A61L-029/06 C08L-071:00

A61L-029/06 C08L-081:06

A61L-029/14

A61M-025/00S3

A61M-029/02

**EPO ICO Class :**

K61M-025/00S1

:

ORIGINAL (O) : 604103100; CROSS-REFERENCE (X) : 604524000

**Document Type :**

Corresponding document

**Citations :**

US5139496 [US5139496] 606023000

-US5176637 [US5176637] 604096000

-US5213574 [US5213574] 604093000

-US5258160 [US5258160] 264558000

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-US5270086 [US5270086] 604096000

-US5304134 [US5304134] 604096000

-US5316706 [US5316706] 264025000

-US5344400 [US5344400] 604096000

-US5423754 [US5423754] 604096000

-EP0171884 [EP-171884]

-EP0452595 A1 [EP-452595]

**Publication Stage :**

(A) United States patent

**Publication Stage 2 :**

(B1) Reexam. Certif., n-nd reexam.

**Abstract :**

A balloon dilatation having a relatively stiff proximal catheter shaft which is formed at least in part of an engineering thermoplastic polymer material with a tensile strength of at least about 10,000 psi, an elongation of at least 50% and a tensile modulus of at least 300,000 psi. The polymer is preferably an aromatic polymer, and particularly polyetheretherketone.

1 / 1 LGST - ©EPO

**Patent Number :**

US5554121 A 19960910 [US5554121]

(A) Patent

US5554121 B1 19980714 [US5554121]

(B1) Reexam. Certif., n-nd reexam.

**Application Number :**

US28021094 19940725 [1994US-0280210]

**Publication actions :**

19940725 US-API [POS; EXM]

FILING DETAILS

US28021094 19940725 [1994US-0280210]

19960910 US-A [POS; EXM]

Patent

US5554121 A 19960910 [US5554121]

19980714 US-B1 [POS; PIF]

Reexam. Certif., n-nd reexam.

US5554121 B1 19980714 [US5554121]

**Action Taken :**

19941125 US/AS02-A [NMC]

ASSIGNMENT OF ASSIGNOR'S INTEREST

OWNER: ADVANCED CARDIOVASCULAR SYSTEMS, INC. 3200 LAKESID; EFFECTIVE

DATE: 19941025

19941125 US/AS02-A [NMC]

ASSIGNMENT OF ASSIGNOR'S INTEREST

OWNER: CHENG, TAI C.; EFFECTIVE DATE: 19940928

19941125 US/AS02-A [NMC]

ASSIGNMENT OF ASSIGNOR'S INTEREST

OWNER: WASICEK, LAWRENCE D.; EFFECTIVE DATE: 19941031

19941125 US/AS02-A [NMC]

ASSIGNMENT OF ASSIGNOR'S INTEREST

OWNER: AINSWORTH, ROBERT D.; EFFECTIVE DATE: 19941025

19970527 US/RR-A [POS; OPP]

REQUEST FOR REEXAMINATION FILED

EFFECTIVE DATE: 19970409

19980519 US/RR-A [POS; OPP]

REQUEST FOR REEXAMINATION FILED

EFFECTIVE DATE: 19980323

19980714 US/B1-A [POS; OPP]

REEXAMINATION CERTIFICATE FIRST REEXAMINATION

20000919 US/RF-A [OPP]

REISSUE APPLICATION FILED

EFFECTIVE DATE: 19980828

**Lasted Event Group :**

OPP

Alive  
Update Code :  
2003-22

1 / 1 CRXX.- @CLAIMS/RRX

**Patent Number :**

5,554,121 A 19960910 [US5554121]

**Patent Assignee :**

Advanced Cardiovascular Systems Inc

**Actions :**

19970409 REEXAMINATION REQUESTED

Issue Date of O.G.: 19970527

Reexamination Request Number: 90/004602

David M. Crorepton, Nawrocki, Rooney & Sivertson, Minneapolis, MN

19980223 REEXAMINATION REQUESTED

Issue Date of O.G.: 19980519

Reexamination Request Number: 90/004946

David M. Crompton, Crompton, Seager and Tufte, Minneapolis, MN

19980714 REEXAMINED CERTIFICATE B15554121, SEQUENCE 3574th

REQUEST - 90/004602, David M. Crorepton, Nawrocki, Rooney & Sivertson, Minneapolis, MN, US (19970409)

CLAIM - AS A RESULT OF REEXAMINATION, IT HAS BEEN DETERMINED THAT: The patentability of claims 1-6 is confirmed. New claims 7-17 are added and determined to be patentable. 1. A balloon dilatation catheter comprising: a) a proximal catheter shaft portion formed at least in part of an extruded engineering thermoplastic polymeric material with a tensile strength greater than 10,000 psi, an elongation greater than 50% and a tensile modulus greater than 300,000 psi, having proximal and distal ends and having a first inner lumen extending therein to the distal ends; b) a distal catheter shaft portion being more flexible than the proximal catheter shaft portion, having proximal and distal ends and a second inner lumen extending from the proximal end of the distal shaft portion to a location proximal to the distal end of the distal catheter shaft portion and being in fluid communication with the first inner lumen extending within the proximal catheter shaft portion; and c) an expandable dilation balloon on the distal catheter shaft portion having an interior in fluid communication with the second inner lumen extending within the distal shaft portion.

19980828 REISSUE REQUESTED

Issue Date of O.G.: 20000919

Reissue Request Number: 09/143503

Examination Group responsible for Reissue process: 3306

Session finished: 15 JAN 2009 Time 15:12:48  
QUESTEL.ORBIT thanks you. Hope to hear from you again soon.